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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,056	07/31/2003	Richard E. Staerzl	M09691	9967
7590 05/12/2006				
William D. Lanyi, Esq. Mercury Marine W6250 Pioneer Road P.O. Box 1939 Fond du Lac, WI 54936-1939		EXAMINER BELL, BRUCE F		
		ART UNIT PAPER NUMBER		
		1746		

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/632,056

Applicant(s)

STAERZL ET AL.

Examiner

Bruce F. Bell

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/31/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 6-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6, 7 and 12 are vague and indefinite with respect to where the sealing material is located since the term "proximate" has been used. It is unclear to the examiner where the sealing material is disposed in relation to the conductive element, since the term "proximate" has been used. "Proximate" means "near", so it is unclear how close the sealing material needs to be to the conductive element for the proper seal to be obtained.

Claims 8-11 and 13-15 are dependent on the above claims and therefore have the same deficiencies.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Boyd et al (US 2004/0231975).

Boyd et al disclose an electrode system for preventing fouling of a surface that is applied directly onto the surface of an aquatic vehicle or structure. See abstract. The electrode system has two sets of electrodes made from any conductive material, preferably a conductive coating. The geometry of the sets of electrodes is such that when the voltage is applied, the electric field radiates outwardly parallel to the surface of the structure and allows for the protection of a large surface area with relatively minor changes in the design of the ship hull or other aquatic structure. See para [0007]. The electrodes can be embedded in an outer layer of a gel coat of a given reinforced plastic or composite, or embedded in a polymer matrix of an outer layer of a ship, vessel or any aquatic structure. See para [0008]. The electrodes are made from any conductive material, but a conductive coating is preferred with UNISHIELD conductive coating. See para [0024]. The UNISHIELD conductive coating composition comprises an emulsion polymer binder, which is a blend of a first emulsion containing a conjugated diene monomer or co-monomer and a second emulsion containing an acrylic polymer. It also contains an effective amount of electrically conductive particles dispersed in the binder and water as a carrier. The electrically conductive particles include a combination of graphite particles and metal containing particles, the graphite particles preferably being natural flake graphite and the metal containing particles being silver or nickel containing particles. See para [0025]. The second emulsion of the polymer binder can be selected

from acrylic, aliphatic or aromatic polyurethane, polyester polyurethane, polyester, epoxy, polyamide, polyimide, vinyl, modified acrylic, fluoropolymer and silicone polymer or a combination thereof. The electrically conductive particles can be graphite particles, carbon nanotubes or metal containing particles or a combination thereof. See para [0026]. The conductive coatings may be applied by spraying, brushing, roll coating, dip application or flow coating. See para [0027]. The sets of electrodes can be embedded in the same or separate, spaced layers of an electrically non-conductive material or applies to the same surface of an electrically non-conductive material, as long as the sets of electrodes are insulated from each other by the electrically non-conductive material. The sets of electrodes can be embedded in the outer layer of a gel coat of a fiber reinforced plastic or composite, or embedded in a polymer matrix of an outer layer of a ship, vessel or aquatic structure. See para [0028].

The prior art of Boyd et al anticipates the applicants instant invention as set forth above with respect to the disclosure to Boyd et al with respect to the instant claims as set forth. The Boyd et al patent discloses a support structure having a conductive element of a matrix material and conductive particles supported within the matrix material and a conductor connected in electrical communication with the conductive element and connected to an electrical power supply. The materials used in the polymer UNISHIELD conductive coating composition of epoxy, vinyl, silicone, polyurethane, etc. are known sealant materials and therefore, inherently would seal the coating to the electrodes to prevent moisture from contacting the conductor wires connected to the

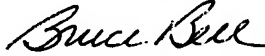
electrodes. Therefore, it appears that since the sealing material is proximate the conductive element, that this aspect of the invention is inherent in the materials used. Therefore, the prior art of Boyd et al anticipates the applicants instant invention as set forth in the instant claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BFB  
May 11, 2006

  
Bruce F. Bell  
Primary Examiner  
Art Unit 1746